

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Atty Dkt. 2466-63

C# M#

SÄRKIMUKKA et al.

TC/A.U. 2882

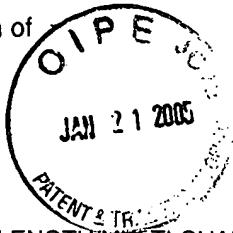
Serial No. 09/837,543

Examiner: Thomas R. ARTMAN

Filed: April 19, 2001

Date: January 21, 2005

Title: A MULTI-WAVELENGTH/MULTI-CHANNEL SYSTEM

2882  
JRW

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**REQUEST FOR RECONSIDERATION**

This is a response/amendment/letter in the above-identified application and includes an attachment which is hereby incorporated by reference and the signature below serves as the signature to the attachment in the absence of any other signature thereon.

 **Correspondence Address Indication Form Attached.****Fees are attached as calculated below:**

Total effective claims after amendment	0	minus highest number	
previously paid for	20	(at least 20) =	0 x \$50.00
			\$0.00 (1202)/\$0.00 (2202) \$

Independent claims after amendment	0	minus highest number	
previously paid for	3	(at least 3) =	0 x \$200.00
			\$0.00 (1201)/\$0.00 (2201) \$

If proper multiple dependent claims now added for first time, (ignore improper); add  
\$360.00 (1051)/\$180.00 (2051) \$

Petition is hereby made to extend the current due date so as to cover the filing date of this  
paper and attachment(s)

One Month Extension	\$120.00 (1251)/\$60.00 (2251)
Two Month Extensions	\$450.00 (1252)/\$225.00 (2252)
Three Month Extensions	\$1020.00 (1253)/\$510.00 (2253)
Four Month Extensions	\$1590.00 (1254)/\$795.00 (2254) \$ 1020.00

Terminal disclaimer enclosed, add	\$130.00 (1814) / \$65.00 (2814) \$
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Applicant claims "small entity" status.  Statement filed herewith

Rule 56 Information Disclosure Statement Filing Fee	\$180.00 (1806) \$
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Assignment Recording Fee	\$40.00 (8021) \$
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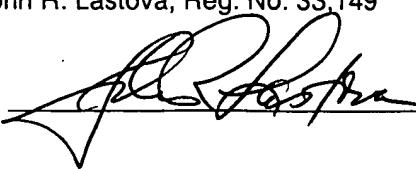
Other:	\$
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**TOTAL FEE ENCLOSED \$ 1020.00**

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140. A duplicate copy of this sheet is attached.

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NIXON & VANDERHYE P.C.  
By Atty: John R. Lastova, Reg. No. 33,149

Signature: 



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

SÄRKIMUKKA et al. Atty. Ref.: 2466-63; Confirmation No. 7576

Appl. No. 09/837,543 TC/A.U. 2882

Filed: April 19, 2001 Examiner: Thomas R. ARTMAN

For: A MULTI-WAVELENGTH/MULTI-CHANNEL SYSTEM

\* \* \* \* \*

January 21, 2005

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**REQUEST FOR RECONSIDERATION**

In response to the Official Action dated July 23, 2004 (for which petition is hereby made for a three month extension of time), Applicants respectfully request reconsideration.

Applicants note with appreciation the Examiner's withdrawal of the previous prior art rejection. Claims 1-15 stand rejected under 35 U.S.C. §103 as being unpatentable over previously-applied U.S. Patent 6,111,673 to Chang in view of newly-applied U.S. Patent 6,603,822 to Brede. This rejection is respectfully traversed.

Cheng discloses a network of Wavelength Division Multiplexed (WDM) links in which switching of channels between different wavelength bands is used for setting up a

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route for high-priority information. The Examiner relies on the description at column 5, lines 41-62 which describes an article related to Session Deflection Virtual Circuit Protocol (SDVC). Rather than random deflections, Chang examines the priorities of the packets before deflecting them. Contrary to the Examiner's contention, this text does not describe transmitting high priority information over plural wavelength bands. Instead, a single wavelength band is chosen. See column 4, lines 50-52. Nor does this text in Chang describe "selecting at *each instant* a wavelength band for transmitting high priority information," as the Examiner alleges.

The Examiner further admits that Chang fails to disclose a channel switching method configured "give a sufficient total quality of the transmission of the high-priority information" (quoted from claim 1). The Examiner relies on Brede contending that Brede teaches WDM. Applicants respectfully disagree.

Brede characterizes his system as a hybrid fiber-coaxial (HFC) distribution network. Optical distribution nodes remotely located from the head end are used to distribute information to subscribers received from optical feeder lines. Optical wavelength channels are not described. Nor does Brede teach determining the signal quality of individual WDM channels. No details of determining signal quality in a WDM system are given. And no switches for switching between WDM channels are disclosed in conjunction with signal quality determination of the individual WDM channels. In contrast, Brede uses electrical channels in the form of orthogonal frequency division multiplex (OFDM) electrical channels. These OFDM electrical channels are referred to

Brede as subbands (also called subcarriers) that correspond to adjacent frequencies. See line column 19, lines 38+.

The text in column 113, lines 56-67 relied on by the Examiner is clearly directed to OFDM electrical subbands (see figures 63+) and not to different optical wavelength channels. The payload channels managed by channel manager 900 are OFDM electrical channels. The IDL, referred to in column 117, lines 40-45 and relied on by the Examiner, is a "standard payload channel." Although optical and electrical signals are both mentioned, the optical fibers simply transport the OFDM channels. See column 19, lines 23-28; column 21, lines 15-19; column 22, lines 1-20; and column 25, lines 1-23. Even if there is an option to switch to a standby fiber in the case of a failure, there is no teaching of optical wavelength channel switching. The channel monitoring by 900 and switching described in column 114 relied on by the Examiner all relate to monitoring and switching electrical channels—not optical channels.

The fundamental assumption upon which the new rejection rests—that Brede teaches switching optical signals to different wavelength bands based on channel quality—is not correct. The Examiner even admits this point at the top of page 5. On this basis alone, the rejections must be withdrawn.

It is also unclear why a person of ordinary skill would want to modify Chang's optical system with Brede's complicated hybrid system. The two systems are very different in approach, content, and operation. Why would a higher bandwidth optical transport network such as Chang's benefit from "switching in the electrical domain using

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existing electrical switches" as proposed by the Examiner? There certainly is no suggestion or motivation to do this in either reference. Everything in Chang is focused on optical fiber and optical switching. The Examiner's suggestion is one that forces Chang in a direction opposite that Chang is moving. The combination is improper.

The Examiner's rejections are improper and should be withdrawn. The application is in condition for allowance. An early notice to that effect is earnestly solicited.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

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